

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A system for providing voice and data services over a wired data network, the system comprising:

an unregulated wireless network including one or more wireless access points wired to the wired data network, the wireless access points operative to provide wireless access to the wired data network over an unregulated wireless connection; a regulated wireless network operative to provide telecommunications services on regulated wireless communications frequencies; and

one or more dual mode digital cordless handsets operative to receive an Internet Protocol (IP) address, when in range of a wireless transmission area of the unregulated wireless network;

provide identification information to the wired data network via the unregulated wireless network;

~~for communicating~~ communicate in a first mode with the one or more wireless access points of the unregulated wireless network via the unregulated wireless connection in order to provide the voice and data services over the wired data network; and

~~further operative to~~ when out of range of the wireless transmission area of the unregulated wireless network and in range of a wireless transmission area of the regulated wireless network, switch from the unregulated wireless network to the regulated wireless network to communicate in a second mode with the regulated wireless network in order to provide ~~the voice and data services~~ telecommunications services on the regulated wireless communications frequencies.

2. (Original) The system of Claim 1, wherein the one or more dual mode digital cordless handsets are further operative to switch between the unregulated wireless network and the regulated wireless network without user action.

3. (Canceled)

4. (Currently Amended) The system of ~~Claim 3~~ Claim 1, wherein the dual mode digital cordless handsets are further operative

- to detect ~~the~~ signaling transmissions of the regulated wireless network;
- to register with the regulated wireless network; and
- to switch from the unregulated wireless network to the regulated wireless network.

5-6 (Canceled)

7. (Currently Amended) The system of ~~Claim 6~~ Claim 1, wherein digital cordless handsets are further operative to transfer the identification information from the unregulated wireless network to the wired data network where ~~it is determined~~ a determination is made regarding what voice and data services to provide based on the identification information.

8. (Original) The system of Claim 1, wherein a one of the one or more dual mode digital cordless handsets is operative to communicate with the wired data network via any one of the wireless access points.

9. (Original) The system of Claim 8, wherein the one or more dual mode digital cordless handsets is operative to switch between any two of the wireless access points during voice or data communication.

10. (Original) The system of Claim 9, wherein switching between any two of the wireless access points comprises exiting a wireless transmission area of a first wireless access point and entering a wireless transmission area of a second wireless access point.

11. (Original) The system of Claim 1, wherein the unregulated wireless connection is an IEEE 802.11b connection.

12. (Original) The system of Claim 1, wherein the regulated wireless connection is a GSM/GPRS connection.

13. (Currently Amended) A method of providing voice and data services over a wired data network and over a regulated wireless network to a dual mode digital cordless handset, comprising:

detecting, at the dual mode digital cordless handset, a dual mode digital cordless handset in range of a wireless access point over an unregulated wireless connection provided by a wireless access point, wherein the wireless access point is wired to the wired data network;

in response to detecting the unregulated wireless connection, receiving an Internet Protocol (IP) address at the dual mode digital cordless handset;

providing identification information associated the dual mode digital cordless handset to the wired data network;

providing for receiving incoming calls directed to the dual mode digital cordless handset and sending outgoing calls from the dual mode digital cordless handset and through the wired data network;

detecting, at the dual mode digital cordless handset, a loss of the unregulated wireless connection, wherein the dual mode digital cordless handset is moved from the transmission range of the wireless access point;

detecting, at the dual mode digital cordless handset, in range of the a connection through the regulated wireless network; and

providing for in response to detecting the connection through the regulated wireless network, receiving incoming calls directed to the dual mode digital cordless handset and sending outgoing calls from the dual mode digital cordless handset through the regulated wireless network.

14. (Currently Amended) The method of Claim 13, ~~whereby if the dual mode digital cordless handset is returned to within the range of the transmission area of the wireless access point,~~ further comprising:

after receiving and sending the calls through the regulated wireless network,
~~detecting a~~ detecting, at the dual mode digital cordless handset, in range of an unregulated
wireless connection provided by a wireless access point ~~over an unregulated wireless connection,~~
wherein the wireless access point is wired to the wired data network; and
~~providing for~~ receiving incoming calls directed to the dual mode digital cordless
handset and sending outgoing calls from the dual mode digital cordless handset and through the
wired data network.

15. (Currently Amended) The method of Claim 13, further comprising:
~~obtaining identification information from the dual mode digital cordless handset~~
~~for provision to the wired data network; and~~
determining the voice and data services to provide to the dual mode digital
cordless handset over the wired data network based upon the ~~obtained~~ received identification
information.

16. (Currently Amended) The method of Claim 13, ~~further comprising assigning an~~
~~IP address to the dual mode digital cordless handset upon detecting the handset being in range of~~
~~the wireless access point, and wherein~~ providing for receiving the incoming calls directed to the
dual mode digital cordless handset and sending the outgoing calls from the dual mode digital
cordless handset through the wired data network comprises establishing a voice over Internet
protocol (VoIP) session between the dual mode digital cordless handset and the wired network
through the wireless access point.

17. (Currently Amended) The method of Claim 16, wherein ~~providing for~~ receiving
the incoming calls directed to the dual mode digital cordless handset comprises:
detecting an IP address ~~corresponding to~~ associated with a telephone
number ~~that is called to~~ which the incoming calls are directed; and
if the IP address associated with the telephone number to which the

incoming calls are directed matches the IP address received at the dual mode digital cordless handset, then ~~wherein establishing the VoIP session is established with the dual mode digital cordless handset that is assigned the IP address corresponding to the telephone number.~~

18. (Currently Amended) The method of Claim 16, wherein ~~providing for~~ sending the outgoing calls from the dual mode digital cordless handset comprises:

establishing the VoIP session between the dual mode digital cordless handset and the wired data network to receive ~~when receiving a dialed number~~

telephone numbers associated with the outgoing calls at the wired data network; and

completing a call the outgoing calls to the party parties corresponding to ~~the dialed number~~ associated with the telephone numbers.

19. (Original) The method of Claim 13, wherein the unregulated wireless connection is IEEE 802.11b connection.

20. (Original) The method of Claim 13, wherein the unregulated wireless connection is a Bluetooth connection.

21. (Original) The method of Claim 13, wherein the regulated wireless connection is a GSM/GPRS connection.

22. (Currently Amended) A system for providing voice and data services over a wired data network and over a regulated wireless network, the system comprising:

a broadband residential gateway comprising a first network device ~~for communicating~~ operative to communicate with the wired data network, a second network device ~~for providing~~ operative to provide a communications link to one or more wired network devices over a ~~local wired network~~ wired connection, and a wireless access point operative to provide wireless access to the wired data network over an unregulated wireless connection;

a regulated wireless network operative to provide telecommunications services on regulated wireless communications frequencies; and

one or more dual mode digital cordless handsets operative to receive an Internet Protocol (IP) address, when in range of a wireless transmission area of the unregulated wireless network; provide identification information to the wired data network via the unregulated wireless network;

~~for communicating~~ communicate in a first mode with the wireless access point via the unregulated wireless connection in order to provide the voice and data services over the wired data network; and

~~further operative to~~ when out of range of the wireless transmission area of the unregulated wireless network and in range of a wireless transmission area of the regulated wireless network, switch from the unregulated wireless network to the regulated wireless network to communicate in a second mode with the regulated wireless network in order to provide the voice and data services over the regulated wireless network.

23. (Currently Amended) The system of Claim 22, further comprising one or more digital wired handsets ~~for communicating~~ operative to communicate with the wired data network in order to provide the voice and data services.

24. (Currently Amended) The system of ~~Claim 23~~ Claim 22, wherein the ~~local wired network~~ wired connection comprises a ~~home phone networking alliance network~~ Home Phoneline Network Alliance (HPNA) connection.

25. (Original) The system of Claim 23, wherein the wired data network is operative to generate a telephone call directed toward the broadband residential gateway and wherein the telephone call may be answered on any of the one or more dual mode digital cordless handsets or any of the digital wired handsets.

26. (Original) The system of Claim 23, wherein the broadband residential gateway is operative to generate a telephone call directed toward the wired data network and wherein the

telephone call may be initiated on any of the one or more dual mode digital cordless handsets or any of the digital wired handsets.

27. (Original) The system of Claim 23, wherein the system further comprises a directory information database and wherein any of the one or more dual mode digital cordless handsets or any of the digital wired handsets are operative to access directory information provided by the directory information database.

28. (Currently Amended) The system of Claim 22, wherein the dual mode digital cordless handsets transmit a user identifier to the wired data network and wherein the system further comprises a restriction database of the wired data network that applies rules to telephone calls of the dual mode digital cordless handsets based on the user of the dual mode digital cordless handsets.

29. (Currently Amended) The system of Claim 22, wherein the system further comprises a web interface at a personal computer linked to the wired data network, wherein the web interface provides for entry of administrative information for providing the voice and data services over the wired data network.

30. (Original) The system of Claim 22, wherein the unregulated wireless connection is an IEEE 802.11b connection.

31. (Original) The system of Claim 22, wherein the unregulated wireless connection is a Bluetooth connection.

32. (Original) The system of Claim 22, wherein the regulated wireless connection is a GSM/GPRS connection.

33. (New) The method of Claim 13, wherein the identification information associated with the dual mode digital cordless handset is stored in a Subscriber Identity Module (SIM) card contained in the dual mode digital cordless handset.

34. (New) The method of Claim 13, wherein the outgoing calls are sent from the dual mode digital cordless handset through the wired data network and the incoming calls are received at the dual mode digital cordless handset through the wired data network using a Session Initiation Protocol (SIP).

35. (New) The method of Claim 34, wherein the SIP is stored at the dual mode digital cordless handset.

36. (New) The method of claim 13, wherein the dual mode digital cordless handset detects a loss of the unregulated wireless connection when the dual mode digital cordless handset is moved from a transmission range of the wireless access point.